

REMARKS:

Applicants express gratitude to the Examiner and her supervisor for conducting a personal interview with Applicants' representative on December 13, 2010. The Examiners' suggestions were very helpful in the preparation of this response.

Applicants respectfully request reconsideration and withdrawal of the outstanding Office Action rejections based on the foregoing amendments and following remarks. Claims 1, 27-37, and 39 have been amended and claims 22 and 26 have been cancelled. Claims 41-46 have been added. No new matter has been added.

Interview Summary

During the personal interview held on December 13, 2010, Applicants' representative presented arguments regarding the differences between the invention as compared to the cited art, specifically Christensen. The Examiner suggested amending the claims to clarify the flow of dry seed coats directly into the dryer.

Response to Rejections under § 103

Claims 1, 3, 12-15, 22-26, 28, and 34-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller (U.S. Patent 4,287,304) in view of Dahlstrom (U.S. 4,309,254) and further in view of Christensen (U.S. Patent No. 2,225,428, for the reasons provided at pages 3-12 of the Office Action. Applicants submit that the claims have been amended as discussed during the interview. The invention involves, *inter alia*, grinding grain to flour, separating seed coat portions, fermenting to form a mash and alcohol, distilling alcohol, forming vinasse and mixing it with the dry seed coat

portions, which serve as the carrier medium for vinasse drying. Accordingly, the efficiencies generated by the presently claimed process and apparatus provide unexpected energy savings.

Applicants submit that independent claim 1 has been amended according to the Examiner's suggestions. Accordingly, claim 1 now requires that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer. Written description support for the amendment can be found on page 12, 1st paragraph. No new matter has been added. The Examiner has acknowledged that "MULLER and DAHLSTROM do not explicitly disclose the dry seed portions are fed directly from the grinding station to a drying station to function as a carrier medium." Office Action mailed September 14, 2010, page 4. Further, Christensen does not suggest the step of feeding separated dry seed coat portions directly from the grinding station to a drying station to function as a carrier medium for vinasse, because Christensen, in fact, mixes moist grains **from the hopper** having 15-25% water content with syrup **solution** having 75%-80% water content to saturate the solid grain material with the syrup and then feeds the resultant solution (having 75% moisture content) to a dryer. Accordingly, Applicants submit that the amendment to claim 1, as suggested by the Examiner, distinguishes over the combination of the cited art because no combination of the cited art suggests that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer. Therefore, Applicants respectfully submit that independent claim 1 is allowable over the combination of Muller, Dahlstrom, and Christensen for at least the above reasons, as well as the reasons presented in previous responses. In addition, each of claims 3, 12-

15, 23-25, and 41 depends from claim 1, and therefore, each of these claims is believed to also be allowable over the combination of cited references for at least the above reasons. Applicants respectfully request that the rejections be withdrawn.

Claims 28, 34-38, 43, and 44 have been amended to depend from new claim 41. New claim 41 requires, among other steps, the steps of feeding the seed coat portions after the grinding and separating steps to a dryer, wherein the seed coat portions serve as carrier material for the vinasse to be dried in the dryer, drying the vinasse at a dew point temperature of above 95°C producing exhaust vapor having a temperature permitting the distillation of alcohol in the distillation station, and heating the distillation station with the exhaust vapor, wherein the temperature of the exhaust vapor permits distillation in the distillation column exclusively with the exhaust vapor. Because no combination of the cited art suggests the steps of claim 41, claim 41 and each of its dependent claims is also believed to be unobvious over the cited combination of references for at least the same reasons.

Claims 2, 4, 27 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and Christensen and further in view of Dennis (U.S. Patent 3,443,958). The Examiner asserts that Dennis discloses a grinding station that separates off the seed coats in a ratio of seed coats to flour. However, Applicants submit that Dennis does not remedy the deficiencies of the combination of Muller, Dahlstrom, and Christensen with regard to independent claims 1 and 41 because Dennis also fails to disclose or suggest an apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1, or a method that requires the step of

feeding the dry seed coat portions after the grinding and separating steps to the dryer as recited in claim 41. Claims 2 and 4 depend from claim 1, and claims 27 and 29 depend from claim 41. Therefore, Applicants submit that claims 2, 4, 27 and 29 are not rendered obvious by any combination of the cited references for at least the above reasons and respectfully request that the rejections be withdrawn.

Claims 5-8, 30, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and Christensen and further in view of Reich (U.S. Patent 2,343,706). The Examiner asserts that Reich discloses an expansion cooler having a two-stage construction, a mixing condenser having a single-stage construction, and that the mixing condenser heats the product stream to a temperature below the gelatinization temperature of the raw material and the steam-jet injection heats the product stream to a temperature above the gelatinization temperature of the raw material. Applicants submit that Reich does not remedy the deficiencies of the combination of Muller, Dahlstrom, and Christensen with regard to independent claims 1 and 41 because Reich also fails to disclose or suggest an apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1, or a method that requires the step of feeding the dry seed coat portions after the grinding and separating steps to the dryer as recited in claim 41. Claims 5-8 depend from claim 1, and claims 30 and 31 depend from claim 41. Therefore, Applicants submit that claims 5-8, 30, and 31 are not rendered obvious by any combination of the cited

references for at least the above reasons and respectfully request that the rejections be withdrawn.

Claims 9, 10, 32, and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and Christensen, and further in view of Prentice (U.S. Patent 4,328,317). The Examiner asserts that Prentice discloses a degassing station between fermentation and distillation stations and that the mash is preheated under pressure and heat to allow for degassing. Applicants submit that Prentice does not remedy the deficiencies of the combination of Muller, Dahlstrom, and Christensen with regard to independent claims 1 and 41 because Prentice also fails to disclose or suggest an apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1, or a method that requires the step of feeding the dry seed coat portions after the grinding and separating steps to the dryer as recited in claim 41. Claims 9 and 10 depend from claim 1, and claims 32 and 33 depend from claim 41. Therefore, Applicants submit that claims 9, 10, 32, and 33 are not rendered obvious by any combination of the cited references for at least the above reasons and respectfully request that the rejections be withdrawn.

Claims 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and Christensen and further in view of Ginder (U.S. Patent 4,407,662). The Examiner asserts that Ginder discloses using a molecular sieve which is operated at a pressure of 1.7 bar or more. However, Applicants submit that Ginder does not remedy the deficiencies of Muller, Dahlstrom, and Christensen with regard to independent claim 1 because Ginder also fails to disclose or suggest an

apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1. Therefore, Applicants submit that claims 16 and 17, which depend from claim 1, are not rendered obvious by any combination of the cited references for at least the above reasons and respectfully request that the rejections be withdrawn.

Claims 18, 19, 39, and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and Christensen and further in view of Stoltenburg (U.S. Patent 3,968,739). The Examiner asserts that Stoltenburg discloses a vinasse processing apparatus for decanting and a pre- and final- evaporator. However, Applicants submit that Stoltenburg does not remedy the deficiencies of Muller, Dahlstrom, and Christensen with regard to independent claims 1 and 41 because Stoltenburg also fails to disclose or suggest an apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1, or a method that requires the step of feeding the dry seed coat portions after the grinding and separating steps to the dryer as recited in claim 41. Claims 18 and 19 depend from claim 1, and claims 39 and 40 depend from claim 41. Therefore, Applicants submit that claims 18, 19, 39, and 40 are not rendered obvious by any combination of the cited references for at least the above reasons and respectfully request that the rejections be withdrawn.

Claims 20 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom, Christensen, and Stoltenburg, as applied to claims 18-19 above, and further in view of Ginder. The Examiner asserts that Ginder discloses dehydration of alcohol comprising a molecular sieve. Applicants submit that neither

Stoltenburg nor Ginder remedies the deficiencies of Muller, Dahlstrom, and Christensen with regard to independent claims 1 because each of Stoltenburg and Ginder also fails to disclose or suggest an apparatus having the feature that the feeder be configured to feed separated dry seed coat portions directly from the grinding station to the dryer, as recited in claim 1. Therefore, Applicants submit that claims 20 and 21, which depend from claim 1, are not rendered obvious by any combination of the cited references for at least the above reasons and respectfully request that the rejections be withdrawn.

New Claims

Claims 41-46 have been added to define further embodiments of the invention.

New independent claim 41 requires, *inter alia*, feeding the dry seed coat portions after the grinding and separating steps to the dryer. Written description support for the claim can be found throughout the application, including the claims as originally written and the disclosure on pages 10-13. No new matter has been added. This recited feature is very similar to the feature of claim 1 discussed above. Applicants respectfully submit that independent claim 41 is also allowable over the combination of Muller, Dahlstrom, and Christensen for at least the above reasons, as well as the reasons presented in previous responses. Moreover, Applicants submit that claim 41 recites the step of heating the distillation station with the exhaust vapor, wherein the temperature of the exhaust vapor permits distillation in said distillation column exclusively with said exhaust vapor. No combination of the cited art discloses the method step of using the exhaust vapor to exclusively heat the distillation column for distillation. Thus, Applicants

submit that claim 41 is patentable over the combination of cited references for this reason as well.

New claim 42 is directed to the inventive apparatus and requires feeding means for feeding dry seed coat portions from said grinding means to said dryer, wherein said dry seed coat portions serve as a carrier medium for said vinasse. Written description support for the claim can be found throughout the application, including the claims as originally written and the disclosure on pages 10-13. No new matter has been added. This recited feature is very similar to the feature of claim 1 discussed above. Applicants respectfully submit that independent claim 42 is also allowable over the combination of Muller, Dahlstrom, and Christensen for at least the above reasons, as well as the reasons presented in previous responses.

Written description support for the newly added claims 43-46 may be found, for example, at page 12, lines 1-4 of the specification. No new matter has been added.

Conclusion

In view of the above amendments and remarks hereto, Applicants believe that all of the Examiner's rejections set forth in the September 14, 2010 Office Action have been fully overcome and that the present claims fully satisfy the patent statutes.

A Notice of Allowance is respectfully requested.

The Director is authorized to charge any fees or overpayment to Deposit Account No. 02-2135.

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